1N957B-1 thru 1N986B-1

Silicon Zener Diode Series

Rev. V2

Electrical Specifications: T_A = +25°C (unless otherwise specified)

Part #[1]	Normal Zener Voltage V_Z	Zener Test Current I_{ZT}	Max. Zener Impedance Z_{ZT} @ I_{ZT}	Z_{ZK}	@ I_{ZK}	Max. DC Zener Current I_{ZM}	Max. Surge Current I_{ZSM}	Max. Reverse Leakage I_R @ V_R		Max. Temperature Coefficient aV_Z
	Volts	mA	Ohms	Ohms	mA	mA	mA	mA	Volts	%/°C
1N971B-1	27	4.6	41	750	0.25	13	70	5	20.6	0.090
1N972B-1	30	4.2	49	1000	0.25	12	65	5	22.8	0.091
1N973B-1	33	3.8	58	1000	0.25	11	60	5	25.1	0.092
1N974B-1	36	3.4	70	1000	0.25	10	55	5	27.4	0.093
1N975B-1	39	3.2	80	1000	0.25	9.5	46	5	29.7	0.094
1N976B-1	43	3.0	93	1000	0.25	8.8	44	5	32.7	0.095
1N977B-1	47	2.7	105	1500	0.25	7.9	40	5	35.8	0.095
1N978B-1	51	2.5	125	1500	0.25	7.4	37	5	38.8	0.096
1N979B-1	56	2.2	150	2000	0.25	6.8	35	5	42.6	0.096
1N980B-1	62	2.0	185	2000	0.25	6.0	30	5	47.1	0.097
1N981B-1	68	1.8	230	2000	0.25	5.5	28	5	51.7	0.097
1N982B-1	75	1.7	270	2000	0.25	5.0	26	5	56.0	0.098
1N983B-1	82	1.5	330	3000	0.25	4.6	23	5	62.2	0.098
1N984B-1	91	1.4	400	3000	0.25	4.1	21	5	69.2	0.099
1N985B-1	100	1.3	500	3000	0.25	3.7	18	5	76.0	0.110
1N986B-1	110	1.1	750	4000	0.25	3.3	16	5	83.6	0.110

1. The JEDEC type numbers shown (B Suffix) have a +5% tolerance on nominal Zener Votlage. The suffix A is used to identify +10% tolerance; suffix C is used to identify +2%: and suffix D is used identify +1%; no suffix indicates +20%.

Absolute Maximum Ratings[2,3]

Parameter	Absolute Maximum
Thermal Resistance	250°C/W
Steady-State Power	0.5 W
Forward Voltage	1.1 V @ 200 mA
Operating / Storage Temperature	-65°C to +175°C

2. Exceeding any one or combination of these limits may cause permanent damage to this device.
3. VPT Components does not recommend sustained operation near these survivability limits.

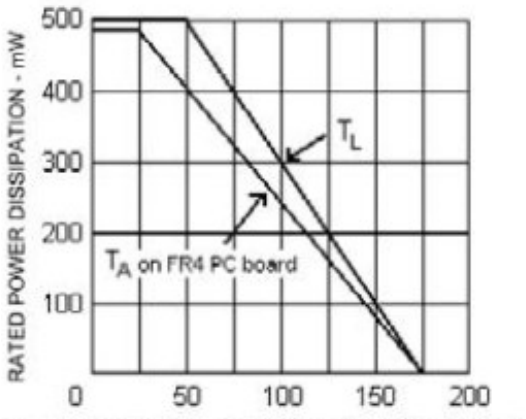


FIGURE 1
POWER DERATING CURVE

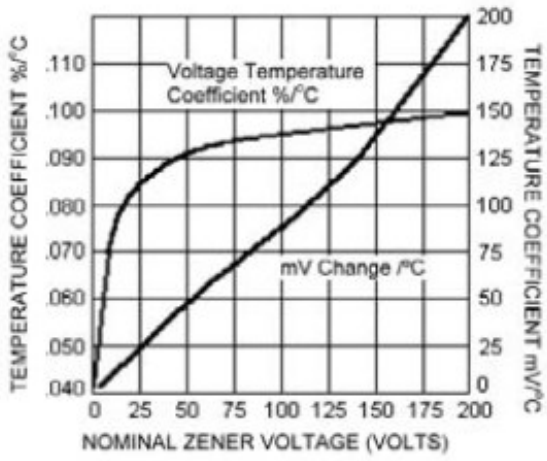


FIGURE 2
ZENER VOLTAGE TEMPERATURE
COEFFICIENT vs. ZENER VOLTAGE

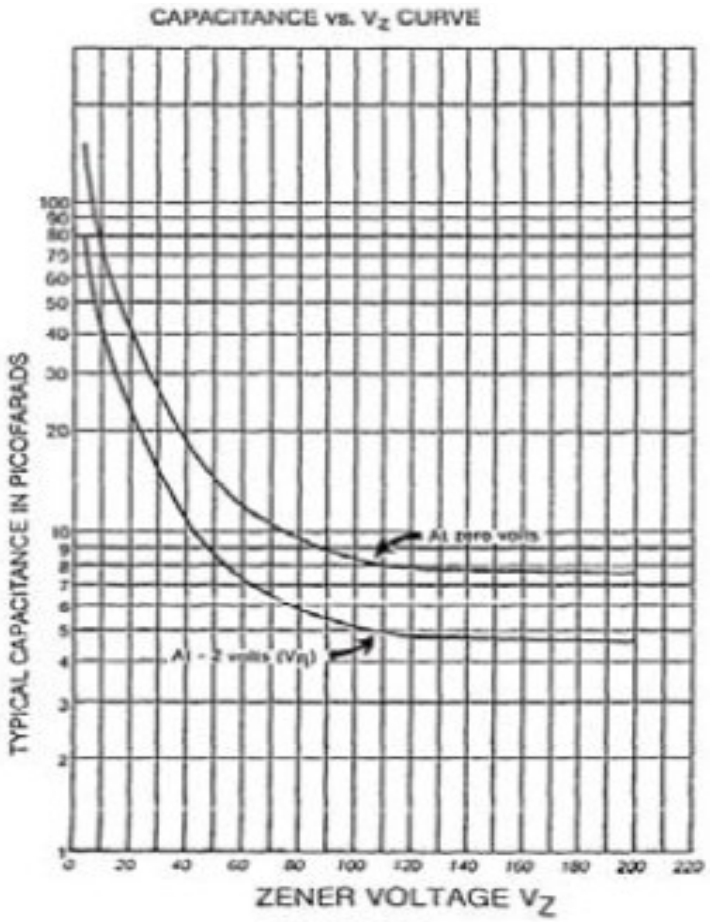
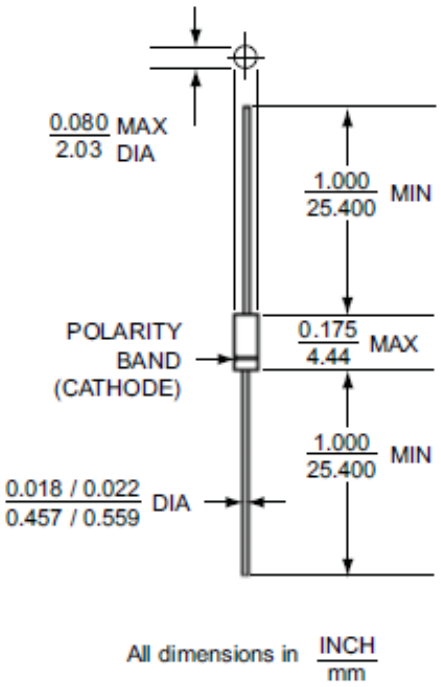


FIGURE 3
CAPACITANCE vs. ZENER VOLTAGE

Outline Drawing



LEADED DESIGN DATA

CASE: Hermetically sealed, DO – 35

LEAD MATERIAL: Copper clad steel

LEAD FINISH: Tin / Lead

THERMAL RESISTANCE: ($R_{\Theta JEC}$): 70 °C/W maximum at L = 0.375 in

THERMAL IMPEDANCE: ($Z_{\Theta JX}$): 12 °C/W maximum

POLARITY: Cathode end is banded.

MOUNTING POSITION: Any

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